

Improvements in or relating to protein factorsAbstract of the Disclosure

A method for preparing and isolating a transformation vector containing CSF/cDNA is described. The method comprises:

- preparing RNA from a cell that produces CSF;
- preparing polyadenylated messenger RNA from said RNA;
- preparing single stranded cDNA from said messenger RNA;
- converting the single stranded cDNA to double stranded cDNA;
- inserting the double stranded cDNA into transformation vectors and transforming bacteria with said vector to form colonies;

- picking pools of 200 to 500 colonies each and isolating plasmid DNA from each pool;

- transfecting the plasmid DNA into suitable host cells for expressing CSF protein;

- culturing the transfected cells and assaying the supernatant for CSF activity; and

- selecting CSF positive pools and screening the colonies used to make the pool to identify a colony having CSF activity. 5

Also described are a cDNA coding for a protein having CSF activity (i.e. CSF/cDNA), a microorganism or cell line transformed with a recombinant vector containing such CSF/cDNA, and a method for producing CSF protein by expressing said CSF/cDNA by culturing a microorganism or cell line. 5

The invention also provides a method of purifying the CSF proteins and the purified proteins so produced.

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